

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9
215 Fremont Street
San Francisco, California 94105

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PUBLIC HEARING

UNDERGROUND INJECTION CONTROL PROGRAM
FEDERALLY ADMINISTERED PROGRAMS
PROPOSED RULE - CALIFORNIA

NEVADA ROOM

October 17, 1983
9:00 a.m.

Reported by:

THOMAS R. WILSON, CSR, CM
(CSR No. 2052)

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SAN FRANCISCO, CALIFORNIA 94105

HEARING PANEL

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 Water Management Division
 US Environmental Protection Agency, Region 9
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RONALD H. CLAWSON
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1 MONDAY, OCTOBER 17, 1983

9:00 O'CLOCK A.M.

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CHAIRMAN THURSTON: Good morning, ladies and gentlemen. We'll call this meeting to order.

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My name is William Thurston. I'm Chief of the Water Supply Section of EPA, Region 9, and I have been designated to serve as the Hearing Officer for this hearing.

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Here with me today is Ronald Clawson, who is a Life Scientist in the Water Supply Section.

This is a public hearing called by the US Environmental Protection Agency, Region 9, to hear and consider public comments on a proposed federally implemented underground injection control program for California. The regulations are being proposed under authority of the Safe Drinking Water Act. The Safe Drinking Water Act, which is Public Law 93-523, as amended, and is Title 42 of the US Code, Sections 300 and following, provides in Section 1422 that a state for which an underground injection control program is required may apply to the Administrator of the Environmental Protection Agency for approval of the state program. If a state does not adopt and submit a UIC program in a timely fashion or if EPA finds that the state's UIC

1 program fails to meet the minimum requirements, EPA
2 is required to prescribe by regulations a UIC
3 program for that state. Before any such program is
4 prescribed, there must be an opportunity for a
5 public hearing. This is that hearing for
6 California.

7 California is one of 23 states and
8 territories for which EPA is proposing a federally
9 implemented program. The proposed program for
10 California and the 22 other states and territories
11 was published in Volume 48, No. 172, of the Federal
12 Register on September 2nd, 1983, Pages 40098
13 through 40138. The proposal includes Well Classes
14 I and III through V. It does not include Class II
15 wells for California as that program has been
16 previously delegated to the state.

17 A copy of the Federal Register will be
18 marked as Exhibit 1 for purposes of this record.

19 (Whereupon, Hearing Exhibit
20 No. 1 was incorporated into
21 the record.)

22 CHAIRMAN THURSTON: We also have on hand
23 a copy of 40 CFR, Parts 124, 144 and 146, which
24 describe the minimum requirements for a UIC program.
25 This has been marked as Exhibit 2 for purposes of

1 this record.

2 (Whereupon, Hearing Exhibit
3 No. 2 was incorporated into
4 the record.)

5 CHAIRMAN THURSTON: We also have a copy
6 of the Safe Drinking Water Act, which will be
7 marked Exhibit 3.

8 (Whereupon, Hearing Exhibit
9 No. 3 was incorporated into
10 the record.)

11 CHAIRMAN THURSTON: Also to be made a
12 part of this record is a copy of the program
13 description for California. This is an informal
14 document which summarizes the UIC requirements in
15 the state and provides the public information on
16 how Region 9 intends to run the program. That will
17 be marked as Exhibit 4.

18 (Whereupon, Hearing Exhibit
19 No. 4 was incorporated into
20 the record.)

21 CHAIRMAN THURSTON: A notice of this
22 public hearing was given by publication. A copy of
23 the notice as published in the Federal Register at
24 Volume 48, Page 40099, on Friday, September 2nd,
25 1983, has already been introduced as part of

1 Exhibit 1.

2 A copy of the public notice was published
3 in newspapers, and this is marked as Exhibit 5.

4 (Whereupon, Hearing Exhibit
5 No. 5 was incorporated into
6 the record.)

7 CHAIRMAN THURSTON: A declaration of
8 publication showing publication in the Sacramento
9 Bee on September 15th, 1983, is marked as Exhibit
10 6.

11 (Whereupon, Hearing Exhibit
12 No. 6 was incorporated into
13 the record.)

14 CHAIRMAN THURSTON: Certain lines as to
15 the place of hearing and as to submission of
16 written comments were dropped in the first notice
17 in the Sacramento Bee. The notice was rerun
18 incorporating the dropped lines on September 22nd,
19 1983. A declaration of publication for the
20 September 22nd, 1983, notice is marked as Exhibit
21 6A.

22 (Whereupon, Hearing Exhibit
23 No. 6A was incorporated into
24 the record.)

25 CHAIRMAN THURSTON: A declaration of

1 publication showing publication in the San
2 Francisco Chronicle and San Francisco Examiner on
3 September 15th, 1983, is marked as Exhibit 7.

4 (Whereupon, Hearing Exhibit
5 No. 7 was incorporated into
6 the record.)

7 CHAIRMAN THURSTON: A declaration of
8 publication showing publication on September 15th,
9 1983, in the Bakersfield Californian is marked as
10 Exhibit No. 8.

11 (Whereupon, Hearing Exhibit
12 No. 8 was incorporated into
13 the record.)

14 CHAIRMAN THURSTON: A tear sheet showing
15 publication in the Los Angeles Times on September
16 15th, 1983, is marked as Exhibit 9.

17 (Whereupon, Hearing Exhibit
18 No. 9 was incorporated into
19 the record.)

20 CHAIRMAN THURSTON: Notice by direct mail
21 was also given to a number of interested persons as
22 appears on our mailing list. The mailing list will
23 not be made a part of this record but is available
24 for inspection if anyone cares to look at it. That
25 list is here in the Regional Office.

1 That takes care of the invitations to
2 come to the meeting. As to the procedures to be
3 followed here, I will call on Mr. Clawson to make a
4 short statement after I conclude my remarks. After
5 that, we will call on interested persons in
6 approximately the order in which registrations were
7 received. So far we have one request with a notice
8 that the Western Oil and Gas Association
9 representative will be here a little bit later
10 today or this morning.

11 As you entered this morning, you were
12 asked to register at the door. Again, if you
13 desire to speak, you should mark on the card that
14 you do desire to speak. Those cards are then
15 brought up to the desk, and we take them in
16 approximately the order they were received.

17 Written comments may also be submitted at
18 this session or submitted to EPA. They should be
19 addressed to Mr. Ronald Clawson, Water Management
20 Division, EPA, Region 9, 215 Fremont Street, San
21 Francisco, California 94105. This is very
22 important. They must be received on or before
23 November 1st, 1983. The public comment period ends
24 on that date. It is important that they be
25 received in the Regional Office by that time and

1 not simply put in the mail by that date. We have
2 to have them here in the Regional Office.

3 We are making a verbatim transcript of
4 this hearing, and all comments are being taken down
5 in shorthand to be transcribed as part of the
6 record. The reporter is Mr. Thomas Wilson of
7 Smythe & Wilson. The reporter is an independent
8 contractor. If you need to have an immediate copy
9 of the transcript, you should make arrangements
10 with Mr. Wilson. Eventually a copy of the
11 transcript will be available here in the Regional
12 Office for inspection, but that sometimes takes a
13 few days.

14 Notice of final action on this proposal
15 will be given to the public by publication in the
16 Federal Register and by mail to all who have
17 participated in the hearing.

18 All written comments are considered a
19 part of the record as well as all oral comments
20 made at the hearing. If you have written comments,
21 it is not necessary for you to repeat them here.
22 You may submit them directly in writing.

23 I will now call on Mr. Clawson for his
24 statement.

25 MR. CLAWSON: My name is Ronald Clawson,

1 and I work in the Water Supply Section in the
2 implementation of underground injection control
3 programs within EPA, Region 9, and I have a few
4 comments to make on the proposed UIC program for
5 the State of California.

6 The program being proposed for California
7 incorporates the minimum requirements of an
8 underground injection control program which EPA
9 promulgated in 1980, was litigated and subsequently
10 amended. We propose a fracture gradient of 0.6 for
11 injection wells within the state. The only
12 additional requirements being proposed for
13 California are the same as those being proposed for
14 other federally administered UIC programs.

15 I have prepared a California UIC program
16 description that describes what the program is and
17 how we plan to implement it within the state. You
18 are welcome to have a copy of this document which
19 is located at the rear of the room.

20 Thank you.

21 CHAIRMAN THURSTON: Thank you.

22 At the present time, we have one card
23 indicating "I want to speak," Mr. Larry Landis of
24 Getty Oil. Mr. Landis, would you step up to the
25 podium, please.

1 MR. LARRY R. LANDIS: Sure. Thank you.
2 These are formal comments here.

3 CHAIRMAN THURSTON: We will mark a copy
4 of the formal comments as Exhibit No. 10.

5 (Whereupon, Hearing Exhibit
6 No. 10 was incorporated into
7 the record.)

8 MR. LANDIS: My name is Larry Landis, and
9 I'm here to represent Getty Oil Company.

10 Getty Oil Company is a corporation
11 primarily engaged in the business of locating,
12 extracting, refining and marketing petroleum and
13 petroleum products. The following comments are
14 offered in response to your proposed rule
15 implementing federally administered underground
16 injection control programs.

17 My first comment concerns proposed
18 Section 147.252, Aquifer Exemptions.

19 EPA has stated it is unaware of
20 underground injection into any underground source
21 of drinking water or USDW in California.
22 Consequently, it has not proposed to exempt any
23 aquifers from the prohibitions relating to
24 injection into USDWs. Getty Oil Company currently
25 injects water-softener brine and flue gas scrubber

1 waste into formations in the Kern River oil field
2 and refinery waste water and produced water into
3 formations in the Fruitvale oil field. Each of
4 these formations (the Vedder and Famosa zones in
5 the Kern River oil field and the Mason-Parker,
6 Santa Margarita, Martin, Kernco and Etchegoin
7 (Fairhaven) zones in the Fruitvale oil field) have
8 a TDS content of less than 10,000 milligrams per
9 liter but qualify for exemption under 40 CFR 144.7.
10 In fact, each referenced zone has been exempted
11 from the definition of USDW for Class II disposal
12 wells by the Program Director.

13 On the basis of the documentation that's
14 provided in Appendices A and B, which I won't go
15 into today, Getty Oil Company requests designation
16 of these aquifers as exempted aquifers to allow
17 continued injection of these wastes.

18 My second comment concerns proposed
19 Section 147.253, Maximum Injection Pressure.

20 Getty Oil Company does not agree that the
21 proposed equation for determining the maximum
22 injection pressure is appropriate. As a first step,
23 the proposed fracture gradient for California
24 should be revised to be at least 0.733 psi per foot,
25 a value which the EPA has proposed for several

1 other states.

2 Second, because in many cases even 0.733
3 would be unnecessarily restrictive, the regulation
4 should allow alternative procedures for determining
5 allowable injection pressures.

6 Therefore, we propose the following
7 additional language be added to the proposed
8 section:

9 Alternately, upon the request of the
10 applicant, the injection pressure for an area
11 or project may be established by alternative
12 procedures, which have been approved by the
13 Director.

14 That concludes my oral comments.

15 CHAIRMAN THURSTON: Thank you.

16 We will, of course, take in to
17 consideration your comments; and as part of the
18 process, EPA will be preparing responsive summaries,
19 and we will respond to your comments during the
20 course of that procedure.

21 Thank you.

22 MR. LANDIS: Thank you.

23 CHAIRMAN THURSTON: At this time I do not
24 have any other cards indicating people wishing to
25 speak. Does anybody in the audience wish to make a

1 comment at this time? No one has so indicated.

2 I do have a note from a Mr. Quellette of
3 Shell Production who indicates that he would like
4 to speak on behalf of WOGA, but he will be late
5 today. He indicated he will be here by 9:45 or
6 10:00 a.m. I suggest, then, we hold a slight
7 recess and reconvene at 10:00.

8 Thank you.

9 (A recess was taken from 9:18 a.m. to
10 9:58 a.m.)

11 CHAIRMAN THURSTON: Hello. We will now
12 reconvene this hearing. It is about three minutes
13 to 10:00.

14 I have a card here indicating that Mr.
15 Quellette representing WOGA is here. Mr. Quellette?

16 A copy of the statement by Mr. Quellette
17 will be marked as Exhibit Number 11.

18 (Whereupon, Hearing Exhibit
19 No. 11 was incorporated into
20 the record.)

21 MR. RAYMOND QUELLETTE: My name is Ray
22 Quellette, and I am appearing here today on behalf
23 of the Western Oil and Gas Association, known as
24 WOGA. I appreciate your allowing the meeting to be
25 recessed shortly so that I could get here.

1 WOGA is a trade association whose members
2 conduct much of the producing, refining,
3 transportation and marketing of petroleum and
4 petroleum products in the western United States.

5 WOGA has been an active participant from
6 the beginning in commenting on the adoption of
7 regulations under the Safe Drinking Water Act for
8 underground injection control, the UIC programs.
9 In addition to participating in this hearing and
10 presenting our comments orally, WOGA is also
11 preparing written comments which will be filed with
12 EPA prior to the November 1st deadline.

13 With regard to the proposed regulations
14 which are the subject of the hearing today, our
15 comments are divided in to two areas: one, general
16 deficiencies with the regulations and, two,
17 comments on specific regulations.

18 First, the general concerns.

19 No. 1, the Schedule of State Applications.
20 The regulations do not state the current status of
21 the various states' applications for UIC
22 responsibility. Thus, for example, although the
23 proposed regulations specify that California has
24 received approval for responsibility of a UIC
25 program for Class II wells, they do not say whether

1 California has submitted an application for
2 responsibility for other classes of wells or, if so,
3 where is that application in the review process. A
4 table or chart which identifies the scope of each
5 state's application, the application's deficiencies
6 where identifiable, and any tentative ruling by EPA
7 on such an application would help alleviate this
8 problem.

9 Without knowing whether a particular
10 state has applied for primary responsibility and
11 whether or not that application is deficient, it is
12 difficult to determine the long-term impact of a
13 proposed state-specific EPA regulation. For
14 example, in the case of a state application with
15 only minor deficiencies, commentators and members
16 of the regulated community may decide to
17 concentrate their efforts to assist in redrafting
18 the state program, the state regulations. Thus,
19 WOGA asks that EPA adopt a schedule of the status
20 of each state application showing the scope of each
21 application, its deficiencies and any tentative
22 ruling.

23 No. 2. Well Classifications. WOGA is
24 concerned that the well classification definitions
25 are too vague. The classifications are not part of

1 the proposed regulations; but since many of the
2 proposed regulations cover only a specific class of
3 wells, it is unclear in some cases which wells will
4 be subject to these regulations. For example, in
5 the preamble of the proposed regulations, EPA notes
6 that it intends to ban all Class IV wells and
7 estimates that there are fewer than a hundred of
8 these wells in the nation. Because we are unsure
9 of EPA's methodology in making this determination
10 and because of the vagueness in the Class IV
11 definition, WOGA is unable to comment on the
12 accuracy of this figure.

13 For another example of confusion caused
14 by the classification definitions, in those states
15 with RCRA-approved hazardous waste programs, it is
16 unclear whether the state or the federal definition
17 of hazardous waste applies for purposes of well
18 classification. This problem is exacerbated in
19 those situations where a state has primary
20 authority for one class of wells but not another,
21 since the terms used to classify a well may be
22 different between the federal and the state regimes.
23 WOGA asks that well classifications be reviewed and
24 clarified as part of these proposed regulations.

25 No. 3. Future Rule Adoption for Specific

1 States. In certain cases, the proposed regulations
2 adopt more stringent regulations for some states
3 than for others. In other cases, some state-
4 specific sections have been reserved for future
5 regulation. To avoid forcing each commentator to
6 comment on all the state-specific proposed
7 regulations, EPA should clarify that any further
8 state-specific regulations will be adopted only
9 after the standard notice and hearing procedures
10 have been followed.

11 Now, this concludes our statement
12 concerning the general comments on the proposed
13 regulations. We now turn our attention to specific
14 proposed regulations.

15 No. 1. Exempted Aquifers in California.
16 The EPA has authorized the California Division of
17 Oil and Gas, the DOG, to implement the UIC program
18 for Class II wells. In approving the program, the
19 EPA also approved a number of aquifer exemptions.
20 This list will be submitted by WOGA as part of its
21 written comments as requested in the preamble for
22 the proposed rules. It is clear from the existing
23 regulations that an aquifer which has been exempt
24 for one class of wells is also exempt for other
25 classes. In addition, it is also clear that an

1 aquifer which is exempt under a state-administered
2 program and approved by the EPA is also exempt
3 under the federal program. We recommend that the
4 list of exempted aquifers be included either
5 individually or by reference in Part 147.252.

6 No. 2. The California Maximum Injection
7 Pressure Formula. The maximum injection pressure
8 formula for California is inaccurate because it
9 does not reflect the widely varying geologic
10 formations within the state nor the pressure losses
11 due to friction in the injection well.

12 We suggest that EPA adopt alternative
13 tests for maximum injection pressure. First, a
14 permit applicant should have the opportunity to
15 show empirically that a specific maximum pressure,
16 not one determined by a formula, will provide the
17 correct balance between safety and well efficiency.
18 The regulations could require the Administrator to
19 approve in advance any testing procedures used to
20 gather the empirical evidence.

21 Second, a formula could be established
22 for any applicant not wishing to develop its own
23 maximum injection pressure through empirical
24 testing. The formula used should include a
25 variable fracture gradient and should more

1 accurately reflect the pressure losses due to
2 friction.

3 Finally, some provision should be made
4 for those facilities currently operating under a
5 state regime which are allowed a maximum pressure
6 in excess of that established by the currently
7 proposed state-specific formula.

8 No. 3. Class I Well Packing Requirements.
9 WOGA urges a reexamination of the packing
10 requirements for Class I wells. For those Class I
11 wells already regulated by a state or that already
12 have packing in place, the proposed regulations
13 would allow the owner or operator to demonstrate --
14 Excuse me -- the proposed regulations should allow
15 the owner or operator to demonstrate that the
16 existing packing is equivalent to that which would
17 be required by the proposed regulations. For those
18 situations where the packing materials are
19 essentially the same or offer the same protective
20 features, this suggestion would alleviate any
21 needless replacement of a packer.

22 No. 4. EPA Protection of Hydrocarbon
23 Production. In the preamble to the proposed
24 regulations for New York, EPA suggests that it is
25 establishing an exemption for certain aquifers

1 which will only apply to Class II wells, quote,
2 because EPA does not want to compromise the
3 hydrocarbon producibility of these oil-bearing
4 aquifers by making this exemption applicable to all
5 classes of wells, end quote. While this may be a
6 laudable goal, WOGA can find nothing in the Safe
7 Drinking Water Act which authorizes EPA to protect
8 hydrocarbon producibility, nor is there a
9 definition of this term in either the Act or the
10 proposed regulations. For this reason, EPA should
11 not attempt to protect hydrocarbon-producing
12 aquifers through regulations promulgated under the
13 Act.

14 No. 5. The Notice Requirements. With
15 regard to the notice and information requirements
16 for permit applications under an EPA-administered
17 program, that is, Part 144, there are two major
18 problems. First, the requirement to notify land
19 owners and tenants within a quarter mile of a well
20 should be implemented only after discussion between
21 the EPA and the permit applicant.

22 Second, the notice requirements have no
23 grandfathering provision for underground injection
24 wells which have been operating safely for a number
25 of years prior to the adoption of these regulations.

1 Owners and operators of the wells which have been
2 operating safely for some period of time should be
3 exempted from the notice requirements.

4 This concludes my testimony on behalf of
5 WOGA. However, before leaving, let me summarize
6 the points that I have just brought up.

7 First, I made some certain suggestions
8 with respect to the general operation of the
9 proposed regulations. These were:

10 For EPA to include a schedule showing the
11 progress made by each state in its application for
12 primary responsibility;

13 Clarifying the classification of wells;
14 and,

15 Assure that the proposed regulations for
16 one state will not be adopted for another state
17 without following formal rulemaking procedures.

18 Secondly, I pointed out some specific
19 concerns regarding the regulations.

20 Include in Part 147.252 the aquifers that
21 already have been exempted by EPA.

22 Provide an alternative to and change the
23 formula used for the maximum injection pressure.

24 Reexamine the packing requirements for
25 Class I wells and include a grandfathering

1 provision for existing Class I wells with
2 equivalent packers.

3 Clarify the EPA authority to protect
4 hydrocarbon producibility and provide a definition
5 of hydrocarbon producibility.

6 Lastly, reduce or at least provide
7 greater flexibility in the notice requirements.

8 On behalf of the Western Oil and Gas
9 Association, I want to thank you for this
10 opportunity to present our views on these proposed
11 regulations.

12 CHAIRMAN THURSTON: Thank you.

13 During the recess, there were no other
14 people who indicated a desire to speak. Has
15 anybody changed their mind since? Are there any
16 further comments?

17 Since no one has indicated an interest to
18 make further comments, we will conclude this
19 hearing. Thank you all for coming.

20 (The hearing concluded at 10:12 o'clock
21 a.m.)

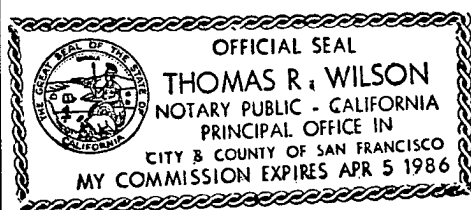
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25

STATE OF CALIFORNIA)
o ss.
City and County of San Francisco)

I, THOMAS R. WILSON, hereby certify that the proceedings in the public hearing on an Underground Injection Control Program for California, held at the US Environmental Protection Agency, Region 9, 215 Fremont Street, San Francisco, California 94105, on October 17, 1983, were taken down in shorthand by me, a Certified Shorthand Reporter and a disinterested person, at the time and place therein stated, and that the proceedings were thereafter reduced to typewriting under my supervision and direction.

I further certify that I am not of counsel or attorney for either or any of the parties to the said deposition, nor in any way interested in the event of this cause, and that I am not related to any of the parties thereto.

IN WITNESS WHEREOF, I have hereunto set my hand
and affixed my seal of office this 24th day of October,
1983.



Thomas R. Nelson

NOTARY PUBLIC in and for the
City and County of San Francisco,
State of California